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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,537	11/15/2001	Paul E. Bender	PA990480D1	5631
23696	7590	09/27/2005	EXAMINER	
Qualcomm, NC 5775 Morehouse Drive San Diego, CA 92121			AHMED, SALMAN	
			ART UNIT	PAPER NUMBER
			2666	

DATE MAILED: 09/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/002,537

Applicant(s)

BENDER, PAUL E.

Examiner

Salman Ahmed

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by Chen et al. (Route Optimization and Location Updates for Mobile Hosts, Distributed Computing Systems, 1996., Proceedings of the 16th International Conference on 27-30 May 1996).

In regards to claim 1, a method and apparatus for providing mobility within a network comprising the step of: a remote system ("a mobile host (MH)" -- page 320, section: IP Mobility Support) transmitting an OSPF link state advertisement ("OSPF packets" -- page 322, section: Internet Routing Protocol) at predetermined intervals is anticipated by "Hello packets are sent periodically" (page 322, section Internet Routing).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Moy (OSPF Version 2, Request for Comments: 1583, March 1994).

In regards to claims 2, 3 and 5, Chen teaches a method and apparatus for providing mobility within a network comprising the step of: a remote system transmitting an OSPF link state advertisement at predetermined intervals.

In regards to claims 2, 3 and 5, Chen does not explicitly teach the advertisement contains a low cost associated with the routing of packets having a destination IP address of remote system; and an age field that is set to a value lower than the maximum age.

In regards to claims 2, 3 and 5, Moy teaches the advertisement contains a low (Page 18 section 3.5 – the cost of the route is the minimum cost to any of the networks falling in the specified range) cost (Section 9 page 35, Interface output cost(s): The cost of sending a data packet on the interface, expressed in the link state metric) associated with the routing of packets having a destination IP address of remote system (Section 9 page 35, IP interface address: The IP address associated with the interface. This appears as the IP source address in all routing protocol packets originated over this interface) and an age field (“LS age field” -- page 60 section 12.1.1 LS age) that is set to a value lower than the maximum age page 60 section 12.1.1 LS age: the age of a link state advertisement is never incremented past MaxAge).

Art Unit: 2666

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Chen's teaching by incorporating cost, ip address and age related fields in advertisement packets as taught by Moy. The motivation is that Moy recommends it in the rfc 1583.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Moy (OSPF Version 2, Request for Comments: 1583, March 1994), and further in view of Saleh et al. (6801496), hereinafter referred to as Saleh.

Chen in view of Moy, teach link state advertisement being send at regular interval as described in the rejections of claim 3 above.

Chen in view of Moy does not explicitly teach a user interface that allows the intervals at which said link advertisements are transmitted to be changed.

Saleh teaches (column 8 lines 26-27) the interval between Hello transmissions is a configurable parameter that can be different for each link.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Chen in view of Moy's teaching by incorporating interval timing parameter to be configurable as taught by Saleh. The motivation is that (as suggested by Saleh, column 8 lines 27-30) nodes are expected to use the HelloInterval parameters specified in their neighbor's Hello message. As such, it is to be configurable.

6. **Prior art pertinent to the application but not used in office action:**

- US 6947400 B2 USPAT Achieving PPP mobility via the mobile IP infrastructure Heller; Howard Andrew
- US 6915345 B1 USPAT AAA broker specification and protocol Tummala; Rambabu et al.
- US 6862446 B2 USPAT Methods and apparatus for the utilization of core based nodes for state transfer O'Neill; Alan et al.
- US 5995503 A USPAT Method and apparatus for providing quality of service routing in a network Crawley; Eric S. et al.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Salman Ahmed whose telephone number is (571)272-8307. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571)272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2666

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Salman Ahmed
Examiner
Art Unit 2666

SA

Seema S. Rao
SEEMA S. RAO 9/23/05
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600